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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,159	05/09/2001	Walter Goerenz	3633-503	2512

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EXAMINER	
ROSSI, JESSICA	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 11/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,159	GOERENZ ET AL.	
	Examiner	Art Unit	
	Jessica L. Rossi	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/30/03, Amendment A*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *4* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 9/30/03. Claims 21-22 were added. Claims 1-22 are pending. Claim 4 is withdrawn as set forth in the previous office action.

2. The objection to the specification has been withdrawn as per Applicant's remarks set forth on p. 6 of the response.

3. The rejections of claims 1, 11, and 18 under 35 U.S.C. 112 2nd paragraph have been withdrawn as per Applicant's amendment to these claims. The rejection of claim 16 under 35 U.S.C. 112 2nd paragraph have been withdrawn as per Applicants remarks set forth on p. 6 of the response.

4. The rejection of claims 1, 5, 7-10, and 18-20 under 35 U.S.C. 103(a) as being unpatentable over Tweadey et al. (of record) in view of Goerenz et al. (of record) and Korn et al. (of record), as set forth in paragraph 10 of the previous office action, has been withdrawn as per Applicant's arguments set forth on p. 8-9 of the response.

5. The rejection of claims 18-19 under 35 U.S.C. 103(a) as being unpatentable over Tweadey et al. in view of Floyd (of record), as set forth in paragraph 12 of the previous office action, has been withdrawn because of Applicant's amendment to the claim 18, which now states that the protective coating is ceramic (see Applicant's arguments p. 9).

Claim Objections

6. Claim 8 is objected to because of the following informalities: "opaque" should be deleted from this claim since this limitation was incorporated into claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 22, it recites the limitation "the opaque protective layer" in line 6. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend the claim to state --an opaque ceramic protective layer-- in line 4.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1, 5, 7-9, and 18-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al. (US 5999136; of record) in view of Koontz (US 4994650; of record) and Tweadey et al. (US 5131967; of record), as set forth in paragraph 6 of the previous office action.

With respect to claim 1, and as set forth in the previous office action, Winter is directed to a process for making a laminated glazing for a windshield (column 1, lines 22-23). The reference teaches the glazing having at least two glass panes 116 (or 216), 232 forming a composite with an inside and an outside, a first coated pane 116 (or 216) being provided on a surface facing the inside of the composite with a corrosion-protected transparent surface coating 112 (or 212) and at least one adhesive layer 234 for coupling the panes together (Figures 2-4).

The process comprises coating the inner surface of pane 116 (or 216) with the transparent surface coating 112 (or 212) such that the coating is spaced a distance from all four edges of the pane (Figures 2-4; column 4, lines 1-7). The reference teaches applying an electroconductive, ceramic paint layer 124 (column 4, lines 14-15 and 44-45) such that it covers a portion of the uncoated region of the pane and extends across a portion of the coating beyond an edge thereof proximate the peripheral edge of the pane (Figure 3; column 4, lines 14-20 and 29-32; column 5, lines 23-25). The reference teaches coupling the panes together with an adhesive layer 234 disposed between the panes (Figure 4; column 4, lines 35-36).

The reference is silent as to the ceramic layer being a protective layer, the ceramic layer being opaque, the ceramic layer being impermeable to diffusion of water vapor, and removing the transparent coating to create an exposed region between about 0.1-5mm.

It is noted the present specification teaches the protective layer being an electroconductive, ceramic paint (p. 3, lines 5-7 and 24-25). Therefore, the skilled artisan would have readily appreciated that the electroconductive, ceramic paint layer of Winter would also serve as protective layer that is impermeable to the diffusion of water vapor.

As for the protective layer of Winter being opaque, the reference teaches the protective layer being capable of impairing the visibility of the driver if it is covers too much area (column 4, lines 57-62). Therefore, the skilled artisan would have readily appreciated that the protective layer is opaque.

It is known in the art to form a laminated glazing having one pane with a transparent coating thereon and which is spaced from the peripheral edges of the pane by coating the entire surface of the pane and subsequently removing the coating from the desired portions, as taught

by Koontz (column 4, lines 18-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the transparent coating of Winter to the entire surface of the pane and subsequently remove the coating from desired portions thereof because such is known in the art, as taught by Koontz, and this would eliminate the time and money needed for precise coating of a particular portion of the pane.

Selection of a particular width for the uncoated regions of the pane would have been within purview of the skilled artisan at the time the invention was made. However, it is known in the art to apply a transparent coating to the entire surface of a glass pane and subsequently remove portions of the coating in an area extending form the peripheral edge of the pane wherein the width of the removed portions is about 0.025-3.18 mm, as taught by Tweadey (column 4, line 61 – column 5, line 5; column 5, lines 11-12).

As for the portion of the claimed range greater than 3.18 and less than 5mm, the skilled artisan would have been motivated to perform the removal step within this portion as well since it is so similar to that taught by Tweadey, only the expected results would have been achieved.

Regarding claims 5, Winter teaches the protective layer being a bakable ceramic paint; note paint can be thermosetting, which would require heating (column 3, lines 6-7).

Regarding claim 7, Winter teaches the protective layer being in the form of a frame (Figures 2-3).

Regarding claim 8, the reference does not expressly state that the protective layer serves a decorative purpose. However, this layer is visible to the human eye (as established above) and therefore could be considered decorative by some since beauty is in the eye of the beholder.

Regarding claim 9, Winter teaches baking the ceramic paint and both panes being glass (column 3, lines 24-26; column 6, lines 22-26).

With respect to claim 18, all the limitations were addressed above with respect to claim 1.

Regarding claim 19, Winter teaches laminating the glass panes together but is silent as to heat and pressure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to bond the glass panes of Winter using heat and pressure because it is known in the art to use heat and pressure to bond glass panes having an adhesive layer between them, as taught by Tweadey (column 6, line 67 – column 7, line 2), where this achieves good interfacial contact and adhesion.

11. Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al. in view of Tweadey et al.

With respect to claim 11, all the limitations were addressed above with respect to claim 1.

Regarding claim 12, selection of a particular angle would have been within purview of the skilled artisan at the time the invention was made.

Regarding claim 13, Winter teaches the protective layer being a bakable ceramic paint (column 3, lines 24-26).

Regarding claim 14, Winter teaches the ceramic paint being electrically conductive (column 4, lines 30-31).

Regarding claims 15-16, Winter teaches the transparent coating may be multilayered and one of the layers being silver (column 4, lines 7-8; column 5, lines 35-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include antireflection dielectric layers adjacent to the silver layer in the multilayered transparent coating

of Winter because such is known in the art, as taught by Tweadey (column 4, lines 21-23 and 30-34), and these layers work in conjunction with the silver layer.

Regarding claim 17, Winter teaches the adhesive layer being thermoplastic PVB (column 4, lines 35-36).

12. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al. in view of the collective teachings of Shukuri et al. (US 6555202) and Marquardt et al. (US 5908675).

With respect to claim 21, all the limitations were addressed above with respect to claim 1; note Winter teaches transparent coating 112 between protective layer 124 and one of the glass panes, protective layer 124 between adhesive layer 234 and transparent coating 112, and transparent coating 112, protective layer 124, and adhesive layer 234 between the glass panes (Figures 3-4; abstract). However, Winter is silent as to the glass panes having a ground peripheral edge.

It is know in the art to grind the peripheral edges of a glass pane that is to be used as a vehicle window, as taught by Shukuri, wherein this treatment reduces discontinuities between the vehicle body and the glass thereby reducing air resistance and wind noise (Figure 6; column 1, lines 14-16; column 2, line 66; column 4, lines 49 and 55-56).

It is also known in the art to grind the peripheral edges of two glass panes that are subsequently bonded by an adhesive layer to form a vehicle window, as taught by Marquardt (Figure 1; column 1, lines 14-15; column 6, lines 56-57).

Therefore, it would have been obvious to the skilled artisan at the time the invention was made use glass panes having ground peripheral edges for the windshield of Winter because such

is known in the art, as taught by the collective teachings of Shukuri and Marquardt, wherein this treatment reduces discontinuities between the vehicle body and the glass thereby reducing air resistance and wind noise.

With respect to claim 22, all the limitations were addressed above with respect to claims 1, 18, and 21.

13. Claims 2-3 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al., Koontz, and Tweadey et al. as applied to claim 1 above, and further in view of Eisenfuhr et al. (DE 2344616; of record) and Siegfried (DE 19632240; of record), as set forth in paragraph 7 of the previous office action.

14. Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al., Koontz, and Tweadey et al. as applied to claim 5 above, and further in view of Carter et al. (US 5030503; of record), as set forth in paragraph 8 of the previous office action.

15. Claims 10 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al., Koontz, and Tweadey et al. as applied to claim 1 above, and further in view of Goerenz et al. (US 5099105; of record), as set forth in paragraph 9 of the previous office action.

Response to Arguments

16. Applicant's arguments filed 9/30/03 have been fully considered but they are not persuasive.

17. On page 7 of the arguments, Applicants state that they disagree with the assertions made by the examiner regarding the teachings of Winter and how they meet the limitations set forth in present claims 1, 11 and 18. Specifically, Applicants argue that Winter does not teach or suggest

a protective layer impermeable to diffusion of water vapor and extending between coated and uncoated regions of the pane proximate the peripheral edge thereof.

The examiner acknowledges this argument, but points out Applicants fail to provide any reasoning to support this argument. Therefore, the examiner invites Applicants to reread the rejection set forth in paragraph 10 of the present office action where the examiner clearly sets forth the teachings of Winter.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **703-305-5419** (571-272-1223 come mid December). The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jessica L. Rossi
Patent Examiner
Art Unit 1733

JEFF H. AFTERGUT
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